# Vancouver Island Technology Park

## Victoria, British Columbia, Canada



Owner: BC Buildings Corporation

Project Team:

Architects: Idealink Architecture; Bunting Coady Architects

Engineers: Keen Engineering (mechanical); Robert Freundlich

(electrical); First Team Engineering (civil)

Contractor: Campbell Construction

Consultants: JVB Consulting (green building); Chris Jones

(energy modeling); Aqua-tex (stormwater)

**Building Statistics:** 

Completion Date: September 2001
Cost: \$17 per square foot

Size: 171,750 gross square feet

Footprint: 83,292 square feet

Construction Type: Speculative Office Development

Use Group: High Tech Research Park

Lot Size: 14 acres

Annual Energy Use: 11,040,900 kBtu/h

Occupancy: 981 Staff



# Version 2.0 *GOLD*

#### Sustainable Sites

- Brownfield Redevelopment: Redeveloping this abandoned hospital facility involved checking for soil contamination and removal of asbestos and underground storage tanks.
- Alternative Transportation: Negotiated extensions of several bus routes to site; bicycle parking
  and showers for 18% of users; negotiated reduction of municipal parking requirements by 50%;
  designated carpool parking.
- Reduced Site Disturbance: 97.8% of degraded habitat was restored by allowing previously irrigated turf area to restore itself naturally and planting native plants and trees. A no-build covenant protects treed areas.
- **Stormwater Management:** 100% of stormwater is treated and infiltrated on site through use of grass swales, grass/gravel pave system and stormwater treatment and retention ponds.

#### **Water Efficiency**

- Water Efficient Landscaping: Native plants and natural meadows require no permanent irrigation.
- Water Use Reduction: Water consumption reduced by 33% through use of dual flush toilets, waterless urinals, electronic sensors on faucets, and low flow shower heads.

#### **Energy and Atmosphere**

 Optimize Energy Performance: Exceeds ASHRAE/IESNA 90.1-1999 by 28%; strategies include occupancy sensors to control lighting, CO<sub>2</sub> demand ventilation control and Optimal Start system to control fan start times.

#### **Materials and Resources**

- Building Reuse: Reused 100% of existing structure and 91% of existing shell.
- Construction Waste Management: 99% of construction waste was salvaged or recycled, saving \$600,000 and costing 60% less than other contractor bids.
- Resource Reuse: Salvaged materials comprise 8% of total materials.
- **Recycled Content:** 33% of materials, measured by LEED's weighted cost value, contain post-consumer and/or post-industrial recycled content (e.g., rebar, millwork, insulation, aluminum panels and rubber flooring).
- Local/Regional Materials: 31% of materials were manufactured within 500 miles, including grass/gravel pavers, concrete, wood, aluminum panels, roofing, siding, windows, wallboard, carpeting and paint.

#### **Indoor Environmental Quality**

 Low-Emitting Materials: All adhesives, sealants, paints, carpets and composite wood emit low or no volatile organic compounds.

#### **Innovation & Design Process**

 Innovation in Design: Integrated Site Water Management Plan and Salmon Bear Creek Rehabilitation treats stormwater from other sites and provides for rehabilitation of local creek; participated in a transportation program that resulted in promotion of alternative transportation; green building guidelines and educational program for tenants.



### Vancouver Island Technology Park LEED Project # 0113

**LEED Version 2.0 Certification Level: GOLD** 

**February 3, 2002** 

1 Points A	Achieved		Possible Points:
	the state of the s		num 52 or more points
Sustaina	able Sites Possible Points:	14	7 Materials & Resources Possible Points:
_	Frosion & Sedimentation Control		Y Prereq 1 Storage & Collection of Recyclables
_	Site Selection	1	1 Credit 1.1 Building Reuse, Maintain 75% of Existing Shell
_	Jrban Redevelopment	1	Credit 1.2 Building Reuse, Maintain 100% of Existing Shell
Credit 3	Brownfield Redevelopment	1	Credit 1.3 Building Reuse, Maintain 100% Shell & 50% Non-Shell
Credit 4.1	Alternative Transportation, Public Transportation Access	1	1 Credit 2.1 Construction Waste Management, Divert 50%
Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1	1 Credit 2.2 Construction Waste Management, Divert 75%
Credit 4.3	Alternative Transportation, Alternative Fuel Refueling Stations	1	1 Credit 3.1 Resource Reuse, Specify 5%
Credit 4.4	Alternative Transportation, Parking Capacity	1	Credit 3.2 Resource Reuse, Specify 10%
Credit 5.1	Reduced Site Disturbance, Protect or Restore Open Space	1	1 Credit 4.1 Recycled Content, Specify 25%
	Reduced Site Disturbance, Development Footprint	1	Credit 4.2 Recycled Content, Specify 50%
	Stormwater Management, Rate and Quantity	1	1 Credit 5.1 Local/Regional Materials, 20% Manufactured Locally
-	Stormwater Management, Treatment	1	1 Credit 5.2 Local/Regional Materials, of 20% Above, 50% Harvested Locally
	andscape & Exterior Design to Reduce Heat Islands, Non-Roof	1	Credit 6 Rapidly Renewable Materials
-	andscape & Exterior Design to Reduce Heat Islands, Roof	1	Credit 7 Certified Wood
Credit 8	ight Pollution Reduction	1	Indeed Environmental Quality
Water E	fficiency Describe Deinter	5	9 Indoor Environmental Quality Possible Points:
Water E	fficiency Possible Points:	5	Y Prereq 1 Minimum IAQ Performance
Credit 1.1	Vater Efficient Landscaping, Reduce by 50%	1	Y Prereq 2 Environmental Tobacco Smoke (ETS) Control
-	Vater Efficient Landscaping, Reduce by 50%  Vater Efficient Landscaping, No Potable Use or No Irrigation	1	1 Credit 1 Carbon Dioxide (CO <sub>2</sub> ) Monitoring
_	nnovative Wastewater Technologies	1	1 Credit 2 Increase Ventilation Effectiveness
	Vater Use Reduction, 20% Reduction	1	Credit 3.1 Construction IAQ Management Plan, During Construction
_	Vater Use Reduction, 30% Reduction	1	Credit 3.2 Construction IAQ Management Plan, Before Occupancy
Credit 3.2	, , , , , , , , , , , , , , , , , , , ,	-	1 Credit 4.1 Low-Emitting Materials, Adhesives & Sealants
Energy	& Atmosphere Possible Points:	17	1 Credit 4.2 Low-Emitting Materials, Paints
			1 Credit 4.3 Low-Emitting Materials, Carpet
Prereq 1	undamental Building Systems Commissioning		1 Credit 4.4 Low-Emitting Materials, Composite Wood
Prereq 2	Inimum Energy Performance		1 Credit 5 Indoor Chemical & Pollutant Source Control
Prereq 3 C	CFC Reduction in HVAC&R Equipment		Credit 6.1 Controllability of Systems, Perimeter
Credit 1.1	Optimize Energy Performance, 20% New / 10% Existing	2	Credit 6.2 Controllability of Systems, Non-Perimeter
	Optimize Energy Performance, 30% New / 20% Existing	2	1 Credit 7.1 Thermal Comfort, Comply with ASHRAE 55-1992
	Optimize Energy Performance, 40% New / 30% Existing	2	Credit 7.2 Thermal Comfort, Permanent Monitoring System
_	Optimize Energy Performance, 50% New / 40% Existing	2	Credit 8.1 Daylight & Views, Daylight 75% of Spaces
	Optimize Energy Performance, 60% New / 50% Existing	2	1 Credit 8.2 Daylight & Views, Views for 90% of Spaces
	Renewable Energy, 5%	1	
_	Renewable Energy, 10%	1	5 Innovation & Design Process Possible Points:
	Renewable Energy, 20%	1	Y
	Additional Commissioning	1	1 Credit 1.1 Innovation in Design: Integrated Site Water Management Plan
	Ozone Depletion	1	1 Credit 1.2 Innovation in Design: Sustainable Transportation Study
_	Measurement & Verification Green Power	1	1 Credit 1.3 Innovation in Design: Exemplary Performance 1 Credit 1.4 Innovation in Design: Green Building Tenant Guidelines
Credit 6	JI GETT FOWEI	1	ğ ~ ~
			1 Credit 2 LEED™ Accredited Professional